Notice of Allowability	Application No.	Applicant(s)	
	10/783.057	FUJIWARA ET AL.	
	Examiner	Art Unit	
	JANET L. SUGLO	2857	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85; NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313  1. This communication is responsive to amendments filed Ju	(OR REMAINS) CLOSED ir or other appropriate commu IGHTS. This application is s 3 and MPEP 1308.	this application. If not included inication will be mailed in due course. <b>THIS</b>	'e
2. ☑ The allowed claim(s) is/are <i>1-5,7,8 and 10-14</i> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unally All b)  Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the certified copies of the priority documents have 1.  Copies of the certified copies of the certified</li></ul>	e been received. e been received in Applicatio	n No	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	IENT of this application.		
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv</li> </ol>			
5. CORRECTED DRAWINGS ( as "replacement sheets") mu-	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review	v ( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the sheet of the shee			
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>	sit of BIOLOGICAL MATE FOR THE DEPOSIT OF BIO	ERIAL must be submitted. Note the DLOGICAL MATERIAL.	
Attachment(s)			
1. Notice of References Cited (PTO-892)	<del></del>	formal Patent Application	
<ol> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>MInformation Disclosure Statements (PTO/SB/08),</li> </ol>	Paper No./	ummary (PTO-413), Mail Date <u>11/17/09</u> . Amendment/Comment	
Paper No./Mail Date 11/17/09			
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>	8. ⊠ Examiner's  9. □ Other	Statement of Reasons for Allowance	

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#### **DETAILED ACTION**

### Response to Amendment

1. The action is responsive to the Amendment filed on July 20, 2009. Claims 1-5, 7, 8 and 10-14 are pending. Claims 1 and 4 have been amended. Claims 6 and 9 have been cancelled. Claim 14 is new.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin Goodman (Reg. No. 63,864) on November 17, 2009.

The application has been amended as follows:

Claim 1, line 12, currently states

"least a position that is actually repaired, and to correct the received defect"

And is hereby amended to state

--least a position that is actually repaired; and

the liquid crystal repair device operable to correct the received defect--

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### Claim 4, line 3, currently states

"causing a liquid crystal testing device to determine whether at"

And is hereby amended to state

--determining with a liquid crystal testing device whether at--

### Claim 4, line 8, currently states

"causing a liquid crystal repair device to receive the defect"

And is hereby amended to state

--receiving with a liquid crystal repair device the defect--

### Claim 4, line 9, currently states

"information from the database, to repair the defect based on the received defect"

And is hereby amended to state

--information from a database, to repair the defect based on the received defect--

### Claim 4, line 13, currently states

"causing the liquid crystal repair device to correct the received defect"

And is hereby amended to state

--correcting with the liquid crystal repair device the received defect--

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# Claim 4, line 20, currently states

"redetermining the presence of the defect based on comparison between the"

And is hereby amended to state

--redetermining with a data management section the presence of the defect based on comparison between the--

## Claim 14, line 11, currently states

"actually repaired, and to correct the received defect information in a case where the"

And is hereby amended to state

--actually repaired; and

the liquid crystal repair device operable to correct the received defect information in a case where the--

## Claim 14, line 13, currently states

"and generate corrected defect information, wherein"

And is hereby amended to state

--and generate corrected defect information;--

#### Claim 14, line 14, currently states

"said data management section is operable to record, in the database, the"

And is hereby amended to state

--wherein said data management section is operable to record, in the database, the--

## Claim 14, line 17, currently states

"said data management section is operable to update the defect information"

And is hereby amended to state

--wherein said data management section is operable to update the defect information--

#### Allowable Subject Matter

- 3. Claims 1-5, 7, 8 and 10-14 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

Lee et al. (US Patent 6,473,664) teaches a manufacturing process automation system using a file server. A first machine tests the substrate and a second machine repairs the substrate (Figure 1). The results from the first machine are sent to the first disk which then relays the information to the second machine (Figure 4). The second machine uses the result information from the first machine to repair the substrate (col 5,

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In 46-50) and then sends the repair information to the server (col 5, In 51-55). The repairer does not correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information.

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Dow et al. (US Patent 5,351,247) teaches an adaptive fault identification system. Substrates are tested and then repaired. The substrates are then retested to see if the repair was successful (col 8, ln 53-67). The substrate follows a pattern of test, repair and repeat; there is no need to test the substrate twice before the repair operation. The repairer does not correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information.

Claims 1-3, 7, 8, and 12 are allowable because the combination of limitations including an apparatus for managing a liquid crystal substrate, comprising: a data management section; a liquid crystal testing device operable to determine if there is a defect and to send the defect information to the data management section; a liquid crystal repair device operable to receive the defect information from the data management section, to repair the defect, to send the repair information to the data management section; and the liquid crystal repair device operable to correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information; said data management section operable to record the defect information and the repair information; said data management section operable

to redetermine the presence of the defect based on the comparison; said data management section operable to update the defect information recorded in said database with the corrected defect information are not found, taught or suggested in the prior art of record.

Claims 4, 5, 10, 11 and 13 are allowable because the combination of limitations including a method for managing a liquid crystal substrate comprising: determining with a tester whether a substrate has a defect; receiving defect information from the testing device; receiving with a repair device the defect information to repair the defect; receiving from the repair device repair information; correcting with the liquid crystal repair device the received defect information in a case where the received defect information contains incorrect information with regard to the defect, and to generate corrected defect information as a part of the repair information; redetermining with a data management section the presence of the defect based on a comparison between the defect information and the repair information; and updating the defect information with the corrected defect information are not found, taught or suggested in the prior art of record.

Claim 14 is allowable because the combination of limitations including an apparatus for managing a liquid crystal substarte comprising; a data management section; a liquid crystal testing device operable to determine whether the substrate has a defect and to send the defect information to the data management section; a liquid crystal repair device operable to receive the defect information from the data management section and repair the substrate based on the defect information and to

send repair information to the data management section; the liquid crystal repair device operable to correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information; said data management section operable to record the defect information and the repair information; said data management section operable to update the defect information recorded in said database with the corrected defect information are not found, taught or suggested in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANET L. SUGLO whose telephone number is (571)272-8584. The examiner can normally be reached on M-F from 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JANET L SUGLO/ Examiner, Art Unit 2857

> /Eliseo Ramos-Feliciano/ Supervisory Patent Examiner, Art Unit 2857